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Director

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MEMORANDUM

October 15, 1986

TO: Greenacres File

FROM: Bill Wright, Project Manager BRW

SUBJECT: Summary of Groundwater Monitoring, April 1986

This is a summary of the analytical results derived from a set of groundwater samples obtained on April 22nd and 23rd, 1986 by Mike Schlender. The samples were taken in the vicinity of the Greenacres Landfill hazardous waste site, and included the following wells:

- EPA Monitoring Well #1 (MW1) - downgradient well located just below the landfill outside the NNW site boundary;
- EPA Monitoring Well #2 (MW2) - a downgradient well about 380 ft. W of MW1;
- EPA Monitoring Well #3 (MW3) - upgradient, above the landfill, approximately 0.1 mi. SE of the site;
- (b)(6) ' Well ((b) - an inactive residential well about 0.1 mi. downgradient from the NNW boundary;
- Consolidated Irrigation District Well 2A (C2) - 1.7 mi. W of the site (downgradient);
- Consolidated Irrigation District Well 3 (C3) - 1.0 mi. W of the site (downgradient).

A copy of the laboratory data may be requested from the file.

Wells C2 and C3 showed no evidence of contamination. The upgradient well, MW3, showed no contamination except for trace amounts of dichloromethane and pentachlorophenol. Trace quantities of both these compounds were also found in the transport blank at the same or higher concentrations, therefore their actual presence in MW3 is questionable.

~~MW is definitely contaminated, exceeding proposed recommended~~ maximum contaminant levels (RMCLs) for drinking water for the following volatile organics:

- t-1,2-dichloroethene at 94 ug/l (PRMCL=70 ug/l)
- tetrachlorethene at 32 ug/l (PRMCL=8 ug/l)
- 1,2-dichloroethane at 11 ug/l (PMCL=5 ug/l)
- trichloroethene at 7 ug/l (PMCL=5 ug/l)
- dichloromethane at 8 ug/l (PRMCL=2 ug/l)

1,1-dichloroethane was also present. No RMCL has yet been proposed for this compound, but its toxicology is probably similar to 1,2-dichloroethane. Trace amounts of chloroform and 1,2-dichloropropane were also present. Heavy metal contamination is also present in JW. The maximum contaminant level (MCL) for mercury (Hg) was exceeded, (2.35 ug/l; MCL=2 ug/l), and substantial increases in zinc (Zn) and lead (Pb) concentrations were found over concentrations occurring in MW3. Since JW is now inactive, it no longer poses a health problem.

Well MW1 also displayed volatile organic contamination with t-1,2-dichloroethene, tetrachloroethene, dichloromethane, and trichloroethene. Dichloromethane was the only one which exceeded the proposed RMCL. A concentration of 4 ug/l was found as compared to the PRMCL of 2 ug/l. Antimony (Sb) was present at a level just below the MCL, and Zn, chromium (Cr), and nickel (Ni) were greatly elevated above background levels.

No volatile organics were detected in the sample from MW2. The amount of Sb found, however, was close to the MCL, and concentrations of Pb, Cr, Zn, and Ni were all significantly elevated.

Pesticide contamination was found in each of the three impacted wells, but at very low levels. The highest concentration of 2,4,5-TP found, for example, was less than 5% of the established MCL.

Brad Ewy of our ERO will be monitoring these wells on a monthly basis for gross water quality parameters: temperature, pH, specific conductance, and static water level. More extensive sampling will be done on a quarterly basis. At a minimum, this should also include: volatile organics, Hg, Pb, Sb, Cr, Zn, and Ni.

BW:cp